

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Currently Amended) A method for reducing noise generation in a turbo engine with rotating blade cascades and stationary blade cascades, said method comprising:

reducing hydrodynamic pressure fluctuations occurring that impinge on [[the]] said cascades by periodically varying a surface circulation an aerodynamic characteristic of at least a section of at least one stator stationary blade cascade, at a frequency that corresponds to a product of a number of rotor blades of one of said rotating blade cascades and a rotational speed thereof, whereby surface circulation on said at least one section varies in a manner that corresponds to said periodic variation.

Claim 2. (Currently Amended) The method according to claim 1, wherein the surface circulation of at least one or more blades blade of the stator stationary blade cascades is varied.

Claim 3. (Previously Presented) The method according to claim 2, wherein the aerodynamic characteristics of the stator are varied through the deflection of at least one blade or sections thereof.

Claim 4. (Currently Amended) The method according to claim 2, wherein the aerodynamic characteristics of the stator are varied by air flowing into or out of at least one blade.

Claim 5. (Currently Amended) The method according to claim 2, wherein several blades of a stator are controlled, individually or corresponding, with a delay, to separation and rotational speed of the stator.

Claim 6. (Currently Amended) The method according to claim 5, wherein

A method for reducing noise generation in a turbo engine with rotating blade cascades, said method comprising:

reducing hydrodynamic pressure fluctuations occurring on the cascades by varying a surface circulation of at least a section of at least one stationary blade cascade; wherein,

the surface circulation of one or more blades of the stator is varied;
several blades of a stator are controlled corresponding, with a delay,
to separation and rotational speed of the stator; and

at least one of phase position and amplitude of control is regulated in response to error signals.

Claim 7. (Previously Presented) The method according to claim 1, wherein surface circulation of the stator is varied periodically.

Claim 8. (Currently Amended) ~~The method according to claim 7,~~
wherein

A method for reducing noise generation in a turbo engine with rotating blade cascades, said method comprising:

reducing hydrodynamic pressure fluctuations occurring on the cascades by varying a surface circulation of at least a section of at least one stationary blade cascade; wherein,

surface circulation of the stator is varied periodically; and
a control frequency of periodic variation corresponds to a base frequency of tonal noise resulting from the product of the rotor blade number and the rotational speed.

Claim 9. (Previously Presented) The method according to claim 4, wherein air is blown out continuously on a trailing edge of at least one blade of the stator in a manner which harmonizes circulation of downstream cascades.

Claim 10. (Currently Amended) A rotor-stator arrangement, comprising:

a rotor;

a stator; and

means provided on at least one stator, for influencing surface circulation of at least one section of the stator; [.]

wherein said means for influencing said surface circulation reduces hydrodynamic pressure fluctuations that impinge on said cascades by periodically varying an aerodynamic characteristic of at least a section of at least one stationary blade cascade, at a frequency that corresponds to a product of a number of rotor blades of one of said rotating blade cascades and a rotational speed thereof, whereby surface circulation on said at least one section varies in a manner that corresponds to said periodic variation

Claim 11. (Currently Amended) The rotor-stator arrangement according to claim 10, wherein said means provided on said at least one stator comprises at least one leading edge flap disposed on at least one blade of the stator.

Claim 12. (Currently Amended) The rotor-stator arrangement according to claim 10, wherein said means provided on said at least one stator

comprises at least one trailing edge flap disposed on at least one blade of the stator.

Claim 13. (Previously Presented) The rotor-stator arrangement according to claim 10, wherein at least one blade of the stator is movable about a predefined axis.

Claim 14. (Previously Presented) The rotor-stator arrangement according to claim 10, wherein at least one blade of the stator has at least one movable surface element.

Claim 15. (Previously Presented) The rotor-stator arrangement according to claim 10, wherein at least one opening is provided on a surface of at least one blade of the stator, for taking in or blowing out air.

Claim 16. (Previously Presented) The A rotor-stator arrangement according to any claim 10, wherein at least one opening is provided on a trailing edge of at least one blade of the stator, for continuously blowing out air.

Claim 17. (Previously Presented) The rotor-stator arrangement according to claim 10, wherein:

actuators are provided for influencing movement of said means; and

said actuators are operated by a technique which is one of mechanical, electrical, piezo-electrical, hydraulic and pneumatic.

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Claim 18. (Previously Presented) The rotor-stator arrangement according to claim 10, wherein hydrodynamic pressure fluctuations occurring on the cascades are reduced by varying the surface circulation of at least a section of at least one stator.

Claim 19. (Original) An engine comprising a rotor-stator arrangement according to claim 18.

Claim 20. (Original) An airplane comprising an engine according to claim 19.